



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/605,394	09/27/2003	Fred Hoffman	28679/05100	2393

24024 7590 04/01/2005

CALFEE HALTER & GRISWOLD, LLP
800 SUPERIOR AVENUE
SUITE 1400
CLEVELAND, OH 44114

EXAMINER

GRAVINI, STEPHEN MICHAEL

ART UNIT	PAPER NUMBER
----------	--------------

3749

DATE MAILED: 04/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/605,394	Applicant(s) HOFFMAN ET AL. eb	
	Examiner Stephen Gravini	Art Unit 3749	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>20040308</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 15 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claims contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claim 15 recites "wherein said purge flow passes from said purge volume via a bore in said manifold in which a fastener securing said air dryer to the vehicle is disposed." That recitation is considered non-enabling from the specification, because paragraph 0032 of the specification states a special fitting **30** is threaded in a central bore **60** then tightened to provide secure mounting of the air dryer **10**. That paragraph also discusses the fitting **30** is further adapted to allow for communication between the air dryer **10** and reservoir **40** through the central bore **60**. Paragraph 0025 specify a specialized (but not special) fitting, fastener, or bolt **30** and give examples but figures **1A-3** and **9-11** show a threaded fastener **30** that is not enabling such that the claimed purge flow can occur. Furthermore, the specification does not describe such that one skilled in the art would be able to make or use the invention such that air flow occurs through the fitting.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 102

Claims 1-2, 6-7, and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Dossaji et al. (US 5,961,698). Dossaji is considered to disclose the claimed invention comprising:

an air dryer **10** including a manifold **16** and a desiccant cartridge **12** wherein said manifold includes a threaded portion **14** for connecting to said desiccant cartridge;

a bore **42** or **36** running through said manifold; and

a fastener **14** disposed in said bore, wherein air flow passing through the air dryer intersects the bore and communicates to a purge volume, wherein said fastener connects said air dryer manifold to the purge volume. Dossaji is also considered to disclose the claimed reservoir which houses said purge volume, wherein said fastener connects said air dryer to said reservoir at column 4 line 40, wherein said assembly is used in connection with a commercial vehicle air brake system at column 1 line 39, wherein said desiccant cartridge contains a set of threads which are used to thread the cartridge onto a set of corresponding threads located on said manifold at column 3 line 49, and a reservoir including a first passageway **36** for transmitting first dried compressed air between said air dryer and the purge volume and a second passageway **42** for transmitting second dried compressed air between said dryer and a downstream component, the second dried compressed air being transmitted between

Art Unit: 3749

the air dryer and the downstream component without passing through the purge chamber.

Claims 10-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Shamine et al. (US 5,607,500). Shamine is considered to disclose the claimed invention comprising:

a manifold **68**, wherein said manifold includes a bore **104** for insertion of a mounting fastener and a threaded portion **84**; and

a spin-on desiccant cartridge **12**, which connects to said threaded portion of said manifold (please see column 4 lines 23-35),

wherein said manifold bore communicates air between the air dryer and a purge volume, and wherein said mounting fastener connects said air dryer manifold to the purge volume (please see column 4 lines 31-46); or alternatively:

a manifold **68**;

a desiccant cartridge **12** mounted on a threaded portion of said manifold (please see column 4 lines 23-35); and

a fastener **84** disposed within a bore running through said manifold;

wherein said fastener is secured to an outer surface of an enclosed reservoir **70**.

Shamine is also considered to disclose the claimed bore is in communication with an air flow path in said air dryer (column 4 lines 64-67) and a purge volume disposed within said reservoir and means for prohibiting rotation of the air dryer (column 4 lines 10-15).

Claim 14 is rejected under 35 U.S.C. 102(b) as being anticipated by Blevins et al. (US 5,595,588). Blevins is considered to disclose the claimed invention comprising:

Art Unit: 3749

aligning an air dryer with a reservoir such that one or more stabilizing mechanisms interlock to prevent rotation of the air dryer relative to the reservoir (please see column 4 lines 17-35);

inserting a fastener through the manifold and into a threaded member in the reservoir (please see column 3 lines 35-50); and

tightening said fastener to said reservoir (please see column 4 line 35).

Claims 15-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Mahoney et al. (US 6,094,836). Claim 15 is treated in light of the prior art assuming that the claimed invention is enabling. Claim 16 is treated under the assumption that 35 USC 112 sixth paragraph is invoked (from the means for recitation) since all the elements of MPEP 2181 appear to satisfy invoking that statute. Mahoney is considered to disclose the claimed invention comprising:

delivering a flow of air to an air dryer manifold with a desiccant bed canister attached to a threaded portion of said manifold (please see column 3 line 59 through column 4 line 7 and column 4 lines 31-58);

passing said flow of said air through the desiccant bed, thereby drying the air (please see column 6 lines 40-50);

delivering the dried air to a set of downstream components; (please see column 8 lines 18-23);

purging the desiccant bed with a purge flow from a purge volume to regenerate the desiccant bed (please see column 7 lines 18-26); and

Art Unit: 3749

exhausting said purge flow after it has passed through said desiccant bed
(please see column 6 lines 51-63);

wherein said purge flow passes from said purge volume via a bore in said manifold in which a fastener securing said air dryer to the vehicle is disposed (please see column 5 lines 17-21); or alternatively:

an air dryer including a manifold **124** and desiccant cartridge **45** connected to a threaded portion **56** of said manifold; and

a means **106** for securing said air dryer to an air reservoir, wherein said air reservoir includes a purge volume;

wherein means for securing said air dryer includes a means for communicating air between said air dryer and said purge volume and a fastening means disposed within said means for communicating air between said air dryer and said purge volume, said fastening means securing said air dryer to said air reservoir (please see column 4 line 59 through column 5 line 16).

Claim 17 is rejected under 35 U.S.C. 102(b) as being anticipated by Zoglman et al. (US 5,427,609). Zoglman is considered to disclose the claimed invention comprising:

an air dryer **10** including a manifold **14** and desiccant cartridge **100**;

a single fastener **18** for securing said manifold to a vehicle; and

an anti-rotation mechanism **24** that prevents rotation of the air dryer when said air dryer is secured to the vehicle.

Claim 18 is rejected under 35 U.S.C. 102(b) as being anticipated by Yandell (US 1,993,201). Claim 18 is also treated under the assumption that 35 USC 112 sixth paragraph is invoked (from the means for recitations) since all the elements of MPEP 2181 appear to satisfy invoking that statute. Yandell is considered to disclose the claimed invention comprising:

an air dryer 1;

a single means 2 for securing said air dryer to an outer surface of an enclosed purge reservoir; and

a means for preventing rotation of the air dryer when said air dryer is secured to the purge reservoir (please see right side of column 7 lines 1-8).

Claim Rejections - 35 USC § 103

Claims 3-5 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dossaji in view of Shamine. Dossaji is considered to disclose the claimed invention, as discussed above under the anticipatory rejection, except for the claimed means for stabilization and rotation prevention. Shamine, another air dryer, is considered to disclose means for stabilization and rotation prevention at column 4 lines 10-15. It would have been obvious to one skilled in the art to combine the teachings of Dossaji with the means for stabilization and rotation prevention, considered disclosed in Shamine, for the purpose of providing a locking and retention feature. Furthermore, Dossaji is considered to disclose the claimed invention, except for the claimed thread measurement. It would have been an obvious matter of design choice to recite a

Art Unit: 3749

claimed thread measurement since the teachings of Dossaji would perform the claimed invention regardless of the thread measurement.

Claims 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yandell in view of Zoglman. Yandell is considered to disclose the claimed invention, as discussed above under the anticipatory rejection, except for the claimed second fastener anti-rotation mechanism. Zoglman, another air dryer, is considered to disclose a second fastener anti-rotation mechanism at column 4 lines 42-63. It would have been obvious to one skilled in the art to combine the teachings of Yandell with the second fastener anti-rotation mechanism, considered disclosed in Zoglman, for the purpose of securing and mounting an air dryer.

Claims 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zoglman. Zoglman is considered to disclose the claimed invention, except for the claimed height percentage. It would have been an obvious matter of design choice to recite a claimed height percentage since the teachings of Zoglman would perform the claimed invention regardless of the height percentage.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA

Art Unit: 3749

1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-22 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-14, 22, and 29-38 of copending Application No. 10/359,984. Although the conflicting claims are not identical, they are not patentably distinct from each other because each of the presently claimed features are recited in various embodiments of the co-pending allowable application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

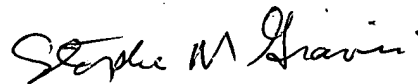
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen Gravini whose telephone number is 571 272 4875. The examiner can normally be reached on normal weekday business hours (east coast time).

Art Unit: 3749

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ira S. Lazarus can be reached on 571 272 4877. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SMG
March 31, 2005

A handwritten signature in cursive script, appearing to read "Stephen M. Gravin".